

CLAIMS

1. A liquid dispensing method comprising:
regulating a flow rate of liquid in a flow
passage by flow rate regulating means while letting
5 the liquid flow through said flow passage between two
or more vessels by applying a pressure of 0.001 MPa
to 10 MPa to the liquid including fine solid
particles and filled in at least one vessel of said
two or more vessels and by setting a pressure of
10 liquid in at least one remaining vessel at a lower
level than the pressure of liquid in said at least
one vessel; and
dispensing the liquid from said flow passage by
a valve.
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2. A liquid dispensing method according to
Claim 1, wherein the liquid including the fine solid
particles and filled in said vessel has a viscosity
of 1 mPa·s to 3000 mPa·s.
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3. A liquid dispensing method according to
Claim 1 or 2, wherein said flow rate regulating means
is a flow rate restricting member provided in said
flow passage, and the regulating includes regulating
25 the flow rate of the liquid in said flow passage by
said flow rate restricting member.

4. A liquid dispensing method according to Claim 3, wherein said flow rate restricting member is provided in said flow passage between each of said two or more vessels and said valve, and a filter is
5 provided in said flow passage on each side of said two or more vessels of said flow rate restricting member.

5. A liquid dispensing method according to
10 Claim 1 or 2, wherein said flow rate regulating means is intermittent pressure means for intermittently applying a pressure to the liquid in said at least one vessel of said two or more vessels, and the regulating includes regulating the flow rate of the
15 liquid in said flow passage by letting the liquid in said flow passage pulse by said intermittent pressure means.

6. A liquid dispensing method according to any
20 one of Claims 1 to 5, wherein the regulating including applying the pressure of 0.001 MPa to 10 MPa to the liquid in said at least one vessel of said two or more vessels by a compressed gas.

25 7. A liquid dispensing method according to Claim 6, wherein the applying includes applying the pressure to the liquid by the compressed gas through

a plunger provided between the compressed gas and the liquid.

8. A liquid dispensing method according to
5 Claims 6 or 7, wherein the applying includes applying the pressure to the liquid by the compressed gas including a solvent vapor.

9. A liquid dispensing method according to any
10 one of Claims 1 to 8, wherein the dispensing includes dispensing the liquid from said flow passage by said valve when the liquid flows through said flow passage between said two or more vessels.

15 10. A liquid dispensing method according to any one of Claims 1 to 8, further comprising:

stopping a flow of the liquid through said flow passage between said two or more vessels,

wherein the dispensing includes dispensing the
20 liquid from said flow passage by said valve during the stopping of the flow of the liquid.

11. A liquid dispensing method according to
Claim 10, wherein the stopping includes applying
25 substantially the same pressure to the liquid in said two or more vessels.

12. A liquid dispensing method according to any one of Claims 1 to 11, wherein the dispensing includes dispensing the liquid from said flow passage by the valve provided in an extending passage
5 communicated with said flow passage.

13. A liquid dispensing method according to any one of Claims 1 to 12, wherein the dispensing includes spraying the liquid by a spray nozzle
10 provided at a dispensing end of said valve.

14. A liquid dispensing method according to Claim 13, wherein the spraying includes atomizing the liquid by gas.
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15. A liquid dispensing method according to Claim 13 or 14, wherein the spraying includes spraying the liquid intermittently.

20 16. A liquid dispensing method according to any one of Claims 1 to 15, wherein the dispensing includes coating an object to be coated with the liquid.

25 17. A liquid dispensing apparatus comprising:
two or more vessels to be filled with liquid;
a flow passage communicating said two or more

vessels with each other;

a valve for dispensing the liquid from said flow passage;

pressure means for applying a predetermined
5 pressure to at least one vessel of said two or more
vessels and for setting a pressure of at least one
remaining vessel at a lower level than the
predetermined pressure of said at least one vessel;
and

10 flow rate regulating means for regulating a flow
rate of the liquid flowing in said flow passage when
said pressure means applies the predetermined
pressure to said at least one vessel of said two or
more vessels and sets the pressure of said at least
15 one remaining vessel at the lower level than the
predetermined pressure of said at least one vessel.